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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/743,556	12/22/2003	Jeffrey Dean Lindsay	KCX-767 (19738)	5072
22827	7590	05/02/2007		
DORITY & MANNING, P.A. POST OFFICE BOX 1449 GREENVILLE, SC 29602-1449			EXAMINER BRITTAIN, JAMES R	
			ART UNIT 3677	PAPER NUMBER
			MAIL DATE 05/02/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/743,556

Applicant(s)

LINDSAY ET AL.

Examiner

James R. Brittain

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-40 and 42-53 is/are pending in the application.
- 4a) Of the above claim(s) 13, 17, 19, 20, 29, 33, 35, 36 and 45-53 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-12, 14, 21-28, 30, 37-40 and 42-44 is/are rejected.
- 7) ☒ Claim(s) 6, 15, 16, 18, 31, 32 and 34 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments, see the appeal brief page 5, last paragraph through page 12, ¶4, filed February 6, 2007, with respect to the rejection(s) of claim(s) 1-5, 7-12, 14, 21-28, 30, 37 and 38-44 under 35 U.S.C. 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Neeb et al. (US 2002/0169435).

### ***Response to Amendment***

The finality of the action mailed May 17, 2006 is withdrawn and the amendment received February 6, 2007 has been entered. The requirement to provide a new brief set forth in the communication of April 9, 2007 is withdrawn and obviated as those grounds of rejection discussed therein are no longer in force.

### ***Election/Restrictions***

Applicant's election without traverse of the species of Group Ia, the layer of Group I and Geometry I in the reply filed on August 12, 2005 is acknowledged.

Claims 13, 17, 19, 20, 29, 33, 35, 36 and 45-53 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on August 12, 2005. Claim 19 has also been withdrawn as it is drawn to the dome geometry, which wasn't elected.

### ***Claim Rejections - 35 USC § 102***

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 7-12, 14, 21-28, 30, 37-39 and 42 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Neeb et al (US 2002/0169435).

Neeb et al. (figures 16A - 16C, 19 and 20; [0074], [0075]) teaches formation of a bi-stable hook tape with a plurality of curvatures set in the tape as shown in figure 20. These curvatures result in a web having a plurality of outward convex configurations with radius, r. The bi-stable configuration moves from a convex configuration for initial engagement to a concave configuration as indicated in [0053], [0006] - [0012]. The concave configuration is desired so as to effect secure engagement. Figure 20 discloses the bi-stable hook web with a plurality of hook regions that can move from the shown convex position to the concave position thereby defining the hooks in the cavities as well. As these portions resiliently snap back and forth, the portions stretch in a longitudinal direction. Both cross and longitudinal curvature is achieved. The fastener can be used on garments (figures 13, 14, 17; [0046], [0052], [0064]). The fastener can further have a partial spherical or ellipsoidal shape and therefor has a dome shape [0061].

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 43 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Neeb et al (US 2002/0169435).

Neeb et al. (figures 1, 2, 4, 5, 13, 14, 16A - 16C, 19 and 20; [0074], [0075]) teaches formation of a bi-stable hook tape with a plurality of curvatures set in the tape as shown in figure 20. These curvatures result in a web having a plurality of outward convex configurations with radius,  $r$ . The bi-stable configuration moves from a convex configuration for initial engagement to a concave configuration as indicated in [0053], [0006] - [0012]. The concave configuration is desired so as to effect secure engagement. Both cross and longitudinal curvature is achieved. The fastener can be used on garments (figures 13, 14, 17; [0046], [0052], [0064]). The fastener can further have a partial spherical or ellipsoidal shape and therefor has a dome shape [0061]. The amount of energy needed to "snap" the resilient hook backing into a concave or convex shape was already considered by Neeb et al. as a variable to be determined and they chose the following criteria:

[0060] A reasonable amount of energy is required to "snap" the hook backing 26 into a convex 36 or a concave position 32. The amount of energy required should be small enough to enable a typical user to overcome the internal stabilizing forces of the backing 26 without over-exertion, yet large enough to avoid unintentional form transition due to forces applied to the fastener during normal use, such as the forces exerted on a diaper fastener, for example, during infant wear. Preferably, the force required to toggle the hook backing 26 should be of similar magnitude to the force required to toggle a common light switch.

The difference is that the amount of force isn't stated as being 50 grams or 400 grams. However, given Neeb et al. discussing a criteria for adjusting the force level to use the fastener on a garment such as a diaper, it would have been obvious to modify the force level to other ranges or levels depending on the use of the fastener as Neeb et al. discusses the use of the

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fastener on many different items and therefor renders obvious the particular choice of 50 grams or 400 grams.

Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Neeb et al (US 2002/0169435) in view of Lord et al. (US 6142986).

Neeb et al. (figures 1, 2, 4, 5, 13, 14, 16A - 16C, 19 and 20; [0074], [0075]) teaches formation of a bi-stable hook tape with a plurality of curvatures set in the tape as shown in figure 20. These curvatures result in a web having a plurality of outward convex configurations with radius,  $r$ . The bi-stable configuration moves from a convex configuration for initial engagement to a concave configuration as indicated in [0053], [0006] - [0012]. The concave configuration is desired so as to effect secure engagement. Both cross and longitudinal curvature is achieved. The fastener can be used on garments (figures 13, 14, 17; [0046], [0052], [0064]). The difference is that the body portion is not stated as having a stretch member extending therefrom comprised of a neck bonded laminate with a tab member extending from the stretch member comprised of a spunbond/meltblown/spunbond with the fastening member secured thereto. However, Lord et al. (figures 1-4) wherein the ear region 38 is an elastomerically stretchable neck-bonded-laminate (col. 12, line 54 - col. 13, line 8) and the tab can be a spunbond-meltblown-spunbond fabric (col. 15, lines 7-12). These materials provide desirable properties in garments. It would have been obvious to modify the device of Neeb et al. to utilize such a construction as Lord et al. suggests that it is desirable to use such constructions in garments.

***Allowable Subject Matter***

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Claims 6, 15, 16, 18, 31, 32 and 34 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

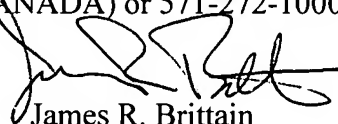
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The patents of Fischer (US 4794028) and Kennedy et al. (US 5260015) teach pertinent hook fastener structure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James R. Brittain whose telephone number is (571) 272-7065. The examiner can normally be reached on M-F 5:30-2:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. J. Swann can be reached on (571) 272-7075. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



James R. Brittain  
Primary Examiner  
Art Unit 3677

JRB